

REMARKS/ARGUMENTS

The Applicant wishes to thank the Examiner for taking the time to discuss the prosecution to date.

The claims have now been amended to improve their clarity by changing the phrase "programming software" to the phrase "program development software". A similar change has been made in the title.

Support for this change is found throughout the application and can be seen most easily at page 7, lines 18 through 27 where it states:

When accessing the controller program 180, the remote users not only obtain the controller program 180, but also obtain related programming software 190 that is used by the browser programs of the remote devices 10 to program or otherwise interact with the controller program 10. That is, the remote devices 10 download from the web server 160 not only the controller program 180 itself, but also the application that allows remote users to generate or create new controller programs, as well as modify existing controller programs.

Thus the term "programming software" does not mean the software that forms the program executed by the industrial controller, but rather a program used to develop the program executed by the industrial controller.

In light of this amendment, the rejection of claims 1 through 5, 10 and 15 through 20 under 35 U.S.C. §103 as being unpatentable over Papadopoulos in view of Lindner is respectfully traversed.

Individually, and in combination, Papadopoulos and Linder fail to disclose a web server in communication with a PLC where the web server provides "program development software onto the Internet for transmission to the remote device so that the remote device is able to generate the controlling program" per claim 1 of the present application. Papadopoulos teaches the sending of commands to the PLC from a remote device, but it is apparent from the context of Papadopoulos that the commands are generated using a program already in the remote device such as a standard web browser and not program development software transmitted from the PLC. Applicant further believes that commands transmitted over the Internet may

be readily distinguished from a program which by its nature must be a set of commands with a logical flow determined during execution.

Lindner teaches a web server that may serve HTTP, but again there is no indication the web server serves program development software. In fact, Lindner expressly indicates that the HTTP (which is arguably not a program, but simply a script for a browser) is intended to display data from an I/O module. While it is true that programs and program development software are data, it is not true that data is necessarily program software or program development software. In this case, the teaching by the references is too broad to enable or anticipate the present invention.

By the same token, for claim 15, individually, and in combination, Papadopoulos and Linder fail to disclose:

a memory means for storing program development software utilized to generate a controller program...[and a] processor means for sending the program development software to a remote device.

or per claim 18:

providing the program development software onto the Internet for transmission to the at least one remote device.

While these two references in combination do not teach necessary elements of the claims, neither do these references alone or in combination recognize or provide the express benefits of the present invention. For example, as noted at page 8, lines 18 through 29, the present invention allows updated versions of the program development software to be instantly accessible to remote users or any user programming the PLC thus greatly simplifying maintenance of program development tools.

Nor do the references recognize or provide a system that ensures that the program development tools compatible with a particular PLC are always available even locally.

The references alone or in combination do not provide a method of allowing any user to purchase programming software on an as needed basis.

Further as disclosed at page 8, lines 5 through 16, the references alone or in combination do not teach or suggest the present invention's ability to allow complex programming tasks to be performed remotely with simplified versions of the programming development software downloaded to the remote device while other development tasks are retained by the PLC.

Thus the references fail to recognize or suggest further modification that would satisfy their deficiencies.

For the reasons stated above, it is believed that claims 1, 15 and 18 are now in condition for allowance as well as those claims dependent on these claims, and therefore, allowance of claims 1-21 is respectfully requested.

If an additional fee is deemed to be due, please charge any fee to Deposit Account No. 17-0055.

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